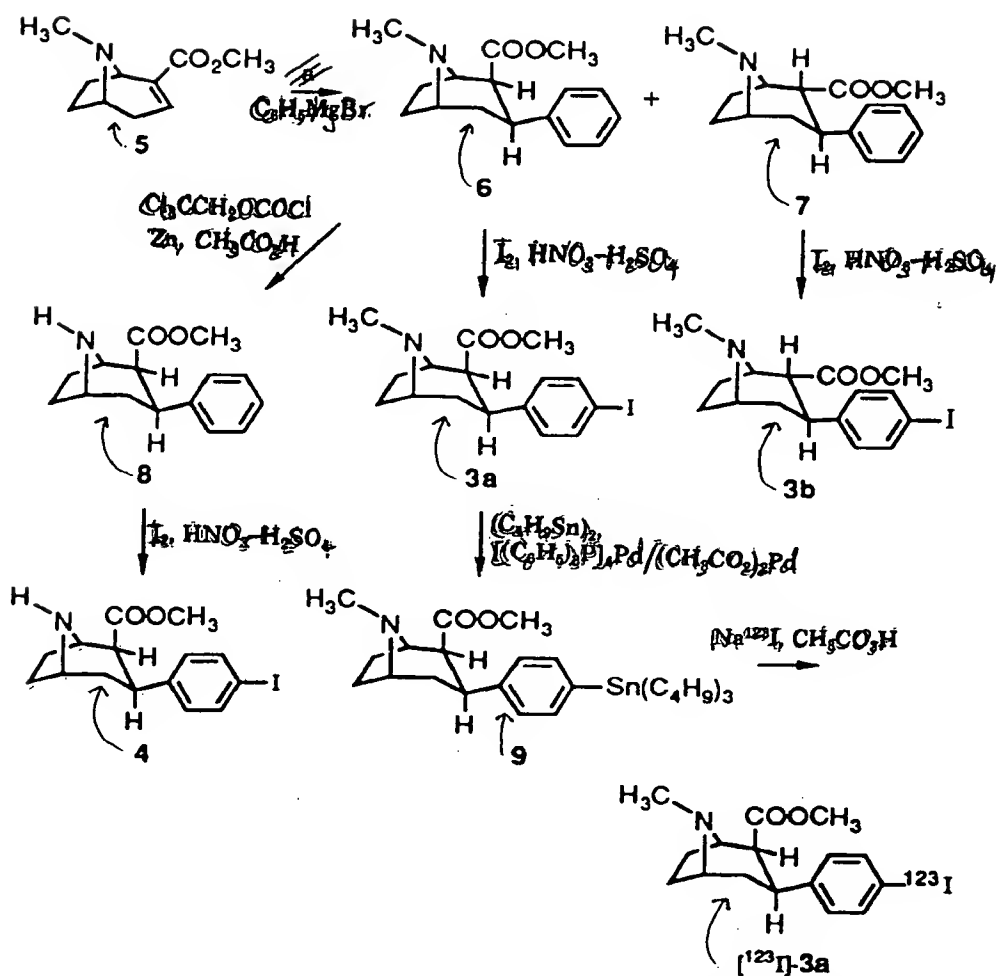


Fig. 2

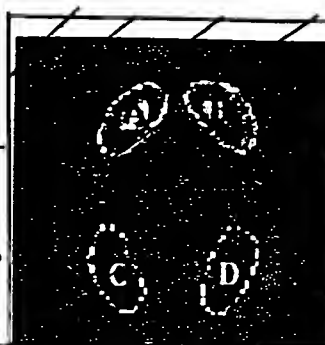


(a)  $\text{C}_6\text{H}_5\text{MgBr}$ . (b)  $\text{I}_2, \text{HNO}_3-\text{H}_2\text{SO}_4$ . (c)  $\text{Cl}_3\text{CCH}_2\text{OCOC1}, \text{Zn}, \text{CH}_3\text{CO}_2\text{H}$ . (d)  $(\text{C}_4\text{H}_9\text{Sn})_2, [(\text{C}_6\text{H}_5)_3\text{P}]_4\text{Pd}/(\text{CH}_3\text{CO}_2)_2\text{Pd}$ . (e)  $\text{Na}^{123}\text{I}, \text{CH}_3\text{CO}_3\text{H}$ .

Fig. 3

# REGION INFORMATION

Name	Activity	Area	Mean
A) R. Striatum	249688	184	1357
B) L. Striatum	261096	184	1419
C) R. Cortical	27156	186	146
D) L. Cortical	33108	186	178



## COLOR SCALE



Transaxial slice through the baboon brain at the level of the occipital cortex and striatum 360 min postinjection 3.3 mCi  $^{123}\text{I}$  CIT. This image was reconstructed from data acquired by the Strichman 810X over 2 min from a plane parallel and approximately 15 mm superior to the canthomeatal line. Typical regions of interest drawn on the computer screen are used for radioactivity measurements. Figure shows right (R) and left (L) regions from striatum and occipito-parietal cortex (cortical). The area of the region is expressed in pixels, with each pixel corresponding to approximately  $1.6 \times 1.6$  mm. The "mean" regional activities are equal to total "activity" divided by "area"

Fig. 4

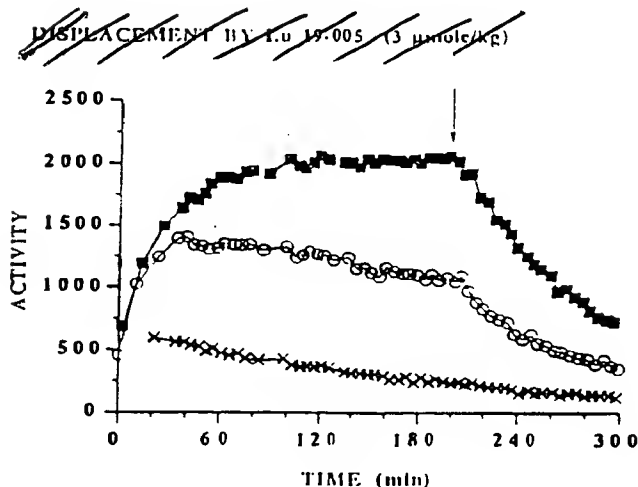


Fig. 5A

~~Regional activity in baboon brain following iv injection of 12.1 mCi (A) and 4.2 mCi (B) [ $^{125}$ I]CIT. Activity is expressed in arbitrary units known from phantom studies to be linear with radioactive concentrations. Displacing agents were injected iv at the times marked with arrows. Activities in three brain regions are graphed: ■, striatum; ○, midbrain; and x, cerebellum.~~

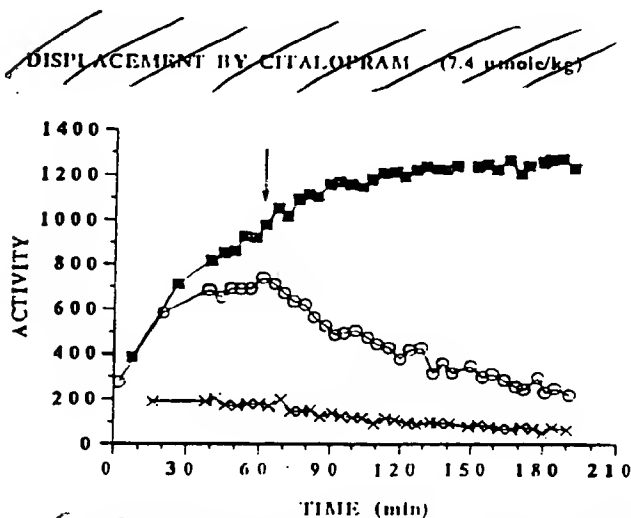


Fig. 5B

~~Regional activity in baboon brain following iv injection of 12.1 mCi (A) and 4.2 mCi (B) [ $^{125}$ I]CIT. Activity is expressed in arbitrary units known from phantom studies to be linear with radioactive concentrations. Displacing agents were injected iv at the times marked with arrows. Activities in three brain regions are graphed: ■, striatum; ○, midbrain; and x, cerebellum.~~